AMENDMENT TO THE CLAIMS

1. – 4. (Cancelled)

5. (Currently Amended) A method for in vitro detection of a gene encoding a drug-targeted protein, comprising

linking an antigenic substance to a drug via a chemical cross-linker to form a probe, wherein the drug is non-protein and *per se* exhibits no antigenicity and wherein the antigenic substance is serum albumin or fluorescein isothiocyanate and wherein the chemical cross-linker is selected from the group consisting of glutaraldehyde, hexamethylene diisocyanate, hexamethylene diisothiocyanate, N,N'-poly(methylene)bis(iodoacetamide), N,N'-ethylenebis(maleimide), ethylene glycol bis(succinimidyl) succinate, sulfosuccinimidyl-4-(p-maleimidophenyl) buryrate, and bisdiazobenzidine;

screening for the gene encoding a protein targeted by said drug, wherein said protein is expressed from a cDNA expression library containing genes of an organism to which the drug is to be administered, by using an antigen-antibody reaction between the antigenic substance of the probe and a labeled antibody specific for the antigenic substance; and

determining the gene sequence of the protein expressed from the cDNA expression library ~~contained~~ within the probe-bound is contained in a phage vector.

6. (Previously Presented) The method of claim 15, wherein said phage display method employs Escherichia coli as a host cell.

7. (Previously Presented) The method of claim 5, wherein the cDNA expression library is from a mammal cell.

8. (Previously Presented) The method of claim 5, wherein the cDNA expression library is from a human cell.

9. (Previously Presented) The method of claim 8, wherein the human cell is a human brain cell.

10. (Previously Presented) The method of claim 8, wherein the human cell is a human placenta cell.

11. (Previously Presented) The method of claim 16, wherein the membrane is a nitrocellulose membrane.

12. (Previously Presented) The method of claim 16, wherein the membrane comprises isopropyl-β-D-thiogalactoside.

13. (Cancelled)

14. (Withdrawn; Currently Amended) The method of claim 5, wherein the chemical cross-linker is ~~sulfosuccinimidyl~~ sulfosuccinimidyl-4-(p-maleimidophenyl) buryrate.

15. (Previously Presented) The method of claim 5, wherein said expressed is by phage display method.

16. (Previously Presented) The method of claim 15, wherein a membrane is employed to capture phage from plated phage cultures obtained during said phage display method.

SUPPORT FOR THE AMENDMENT

Claims 1, 2, and 4 were previously cancelled.

Claims 3 and 13 have been canceled

Claims 5 and 14 have been amended.

Support for the amendment to Claims 5 and 14 is provided by Claims 1-4 and the specification as originally filed, for example at page 3, line 19 to page 4, line1.

No new matter has been entered by the present amendments.